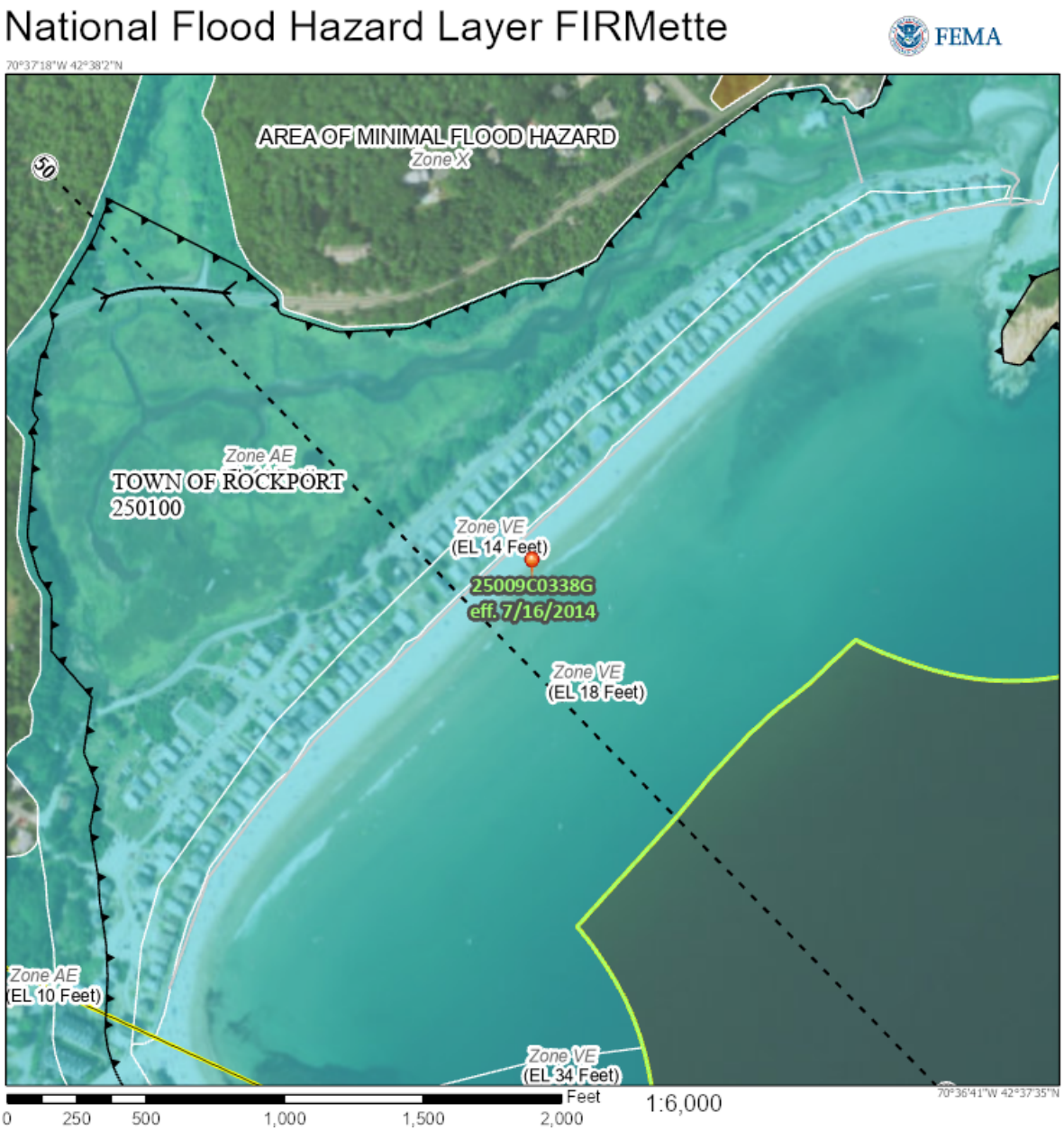
Long Beach Options Committee
Final Report for Rockport Town Meeting
2 April 2022



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1. Introduction

Deciding the Future of Long Beach in a Changing Climate

The current Long Beach parcel leases are set to expire at the end of 2023. Between now and then, the Board of Selectmen must decide whether to renew the leases and on what terms, or to ask Town Meeting to approve selling the parcels and how the parcels should be sold. A third alternative – neither leasing nor selling – would significantly reduce Town revenue.

With the increasingly undeniable evidence of rising sea level and storm surge resulting from climate change, the Town's decisions for the future of Long Beach are more important than ever. Long Beach is the only sizeable residential neighborhood in Rockport that is located in a FEMA special flood hazard area; flooding from normal high tides and storm surges occurs regularly. While it might appear simple and prudent to sell the Long Beach parcels along with the seawall, receive a large infusion of cash and be done with the Town's responsibilities towards the cottages, it is not that simple. Will the Long Beach cottage owners accept ownership of the seawall and the responsibility for maintaining it? If so, who will pay for the periodic beach nourishment needed to stabilize the seawall and maintain the beach? How will the Town continue to provide emergency services, utilities and access to the cottages? And, finally, what will happen to ownership of the beach once all the cottages are inevitably gone but the parcels are not yet completely below the low tide line?[1]

Likewise, although renewing the leases provides continued revenue for the Town as long as the cottages are habitable, there is no way of knowing how long this will be -- the cottages could be there for many years and provide much more income than could be realized from a one-time sale or they could be destroyed by the next series of big storms to strike the coast.

Much more is involved in a decision than just a perceived financial advantage of one choice over another is not much more than a gamble – there are legal, social and scientific issues to consider as well, particularly in light of rising sea level and other climate-change-related issues.

How then to decide?

First, it is important that an irrevocable decision not be made hastily and without a thorough study of the importance of Long Beach to the future of Rockport – not just economic importance, but its importance to the long term vision for the Town.

[1] Once they are completely below the low tide line, ownership reverts to the State.

Second, such a study requires professional expertise – economic, legal, scientific and social -- to help the Town understand the issues before a decision is made. Long Beach cottage owners, Town officials and other Town residents need to be involved in order achieve consensus as to the best way to proceed.

And **third**, as part of that study, the long-term vision for the Town can be updated, and the role of Long Beach in that vision determined.

The Committee

Committee Establishment and Charge

The Long Beach Options Committee is by no means the first to be tasked with studying options for the future of Long Beach and its cottages. A number of committees have been formed previously and excellent studies have resulted. With one important exception – shown in bold in the Committee's charge below – much of the work of the Committee has been reviewing the previous studies and updating financial comparisons.

The Committee was formed as the result of a vote of the May 15, 2021 Spring Town Meeting. The charge of the Committee was defined as follows:

> "The Committee will consider the Town's options when the current Long Beach leases expire in 2023, **with due regard for environmental issues, in particular rising sea levels**, and the need to repair or replace the seawall. The Committee will consider the possible renewal of the Long Beach cottage leases, and also the possible sale of all or portions of the Long Beach property, and the cost, benefits and detriment to the Town of Rockport of all the options considered[2]. The Committee will hold a public hearing to present a report not later than two weeks prior to the 2022 Annual Town Meeting and the Committee will present [their] report at that meeting."

The Committee was not authorized to make a decision on the future of Long Beach; the Board of Selectmen is solely empowered to renew or not renew the leases and to negotiate the terms of the leases. A decision to sell the parcels can only be made by the Board of Selectmen and authorized by the voters at the Annual Town Meeting.

Committee Activities

The Committee held Zoom meetings approximately twice a month from June 2021 through early March 2022. Presentation by several guest speakers on subjects ranging from sediment transport on Long Beach to how other communities are coping with sea level rise helped the Committee and members of the public to understand the issues Rockport is facing with Long Beach.

Approximately 25 members of the public were present at each Zoom meeting.

A number of site visits were made to Long Beach during astronomical high tide events. The site visits allowed members of the public and other Town committees to meet with LBOC members in person and to observe the extent to which the area floods. The following photos illustrate the conditions that were observed.

[2]Note that the Committee was not given the responsibility for creating roadmaps for implementation of each of the options

Long Beach Road viewed from the southwesterly end. The cottage shown is 117 Long Beach Road.

Old County Road viewed looking north

The Beach

Long Beach in 1905

Long Beach is Rockport's largest, and, arguably, most beautiful beach. A Town-owned pocket beach, it straddles the border of the town of Rockport with the city of Gloucester. Access to the beach is through a privately owned toll road or from a Town-owned parking area behind Cape Hedge Beach.

The beach is approximately ¾ mile long, with the majority located in Rockport. It stretches between two outcroppings: Brier Neck in Gloucester and Cape Hedge in Rockport.

The portion in Rockport forms a barrier beach with a narrow dune between the open ocean and a large marsh. There are 149 cottages and accessory buildings located on and behind the dune. The dune is constrained by an aging concrete seawall that protects the cottages from being undermined by wave action, but does not prevent them from being flooded from the marsh behind. Downwash from wave action on the seawall erodes the beach and undermines the seawall; beach nourishment is required periodically to protect the seawall and to maintain the beach itself.

At the northerly end of the beach, Saratoga Creek provides a path for storm surges to enter the marsh and return to the ocean. Large storms overcome the popple dune on Cape Hedge Beach, providing a larger path for storm surges to enter the marsh.

The Cottages

History

Cottages were first built on Long Beach in the early 1900s on parcels leased from the Town of Rockport. Today there are 149 cottages and accessory buildings, some of which are still owned by the families that originally built them over one hundred years ago.

The cottages are all in a FEMA Special Hazard Flood Zone. During storms and high tide events, they are threatened both by waves overtopping the seawall and by flooding from the marsh side. Long Beach, Saratoga Creek and Old County Roads, between the cottages and the marsh, are often flooded, even at normal high tides.

Vehicular access to the cottages is through a privately owned toll road.

Because the cottages are on Town-owned land, they are not covered by Rockport's zoning regulations.

Leases

Prior to 2013, the leases allowed occupancy only between April 15 and October 15. Rents were quite low, with annual increases based on the Consumer Price Index. Lessees paid real estate tax on the assessed value of the cottage itself as well as the assessed value of the parcel.

The current ten-year leases allow occupancy between April 1 and December 1 and expire on December 31, 2023. Rents have been increased considerably according to a schedule contained in the lease. Lessees continue to pay real estate tax on both the assessed values of the cottages and of the parcels.

The Town may terminate a lease either for default of the lessee or at any time thorough a 4/5 vote of the Board of Selectmen. At the expiration or termination of a lease, the lessee must remove the cottage and all personal property from the parcel at the lessee's own expense.

In a change from the previous lease, the current lease incorporates a clause that specifically grants the lessees rights and remedies against the Town for failure to maintain the seawall, the beach area and other "non-lease property."

Examples of both leases may be found on the Long Beach Options Committee's Google Drive at bit.ly/LongBeachOptions.

Lease Settlement Agreement and Release

In 2018, in response to two lawsuits brought against the Town by tenants of Long Beach, the Town reached an agreement, the major aspects of which are: (1) members of the public can no longer pass across leased land except between December 2 and March 31; (2) rent increases will be limited to 4% per year after the current leases expire; and (3) lessees will have the right

of first refusal if the Town decides to sell the parcels. The Town is also under no obligation to continue leasing the parcels after the leases expire.

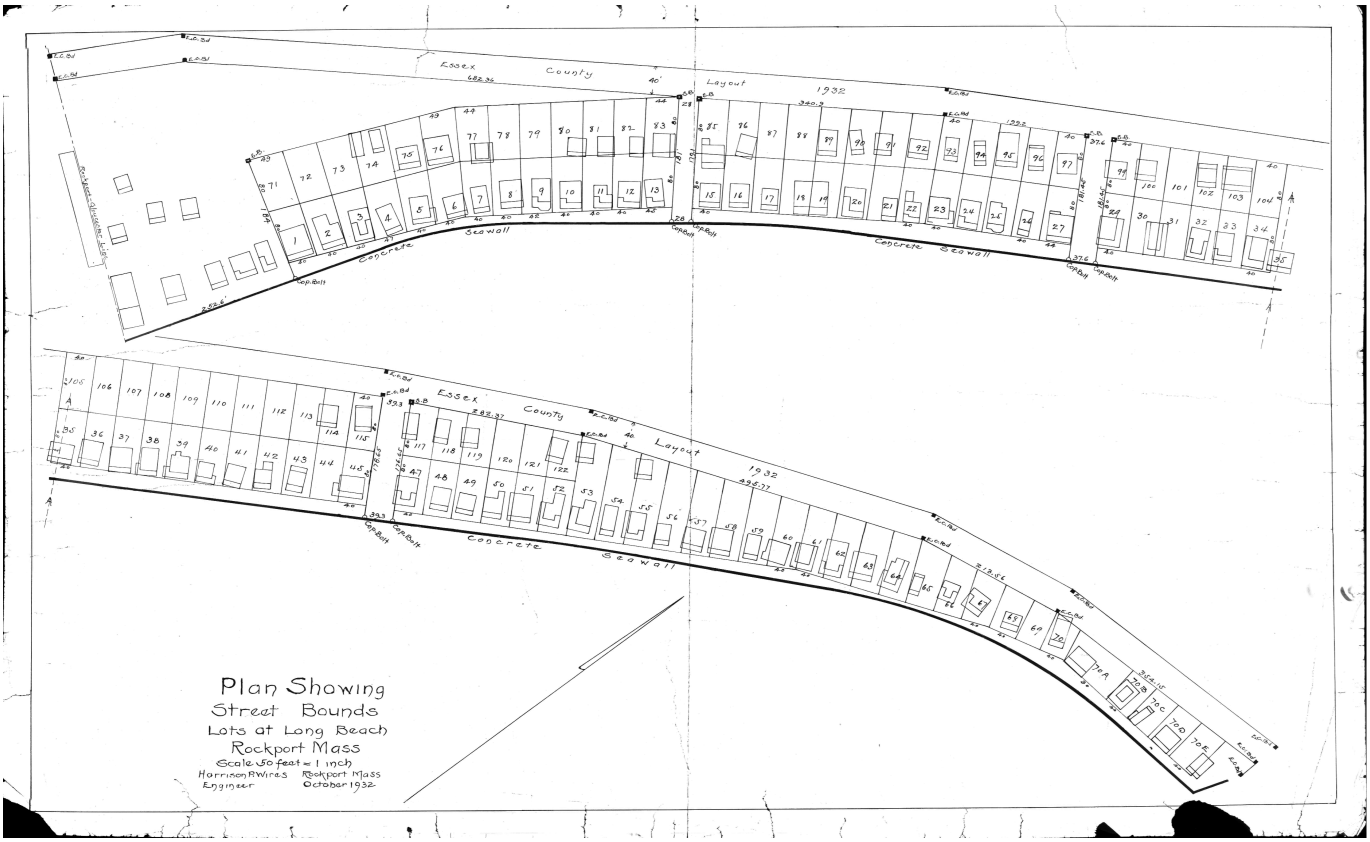
The Lease Settlement and Release can be found on the Long Beach Options Committee's Google Drive at bit.ly/LongBeachOptions.

Economic Importance to the Town

Total annual revenue from the leases and taxes on the Long Beach parcels and cottages is currently about $2.5 million, constituting approximately 8% of the Town's total annual revenue.

In addition, although the beach is closer to Gloucester's commercial areas than to Rockport's, the merchants of Rockport undoubtedly benefit from Long Beach's residents and visitors.

The Parcels[3]



1932 Plan Of Long Beach Parcels

Introduction

Rockport currently leases 149 parcels to cottage owners on Long Beach. The parcels average approximately 3,200 square feet in area, with a few being smaller, and a few being double that size. The parcels have not been surveyed, so boundaries between cottages are only approximate. A complete survey would be necessary if the parcels were to be sold individually.

Determination of Value

The Committee did not have funding or authorization to hire a professional appraisal firm to determine current value of the parcels in order to analyze the options of selling. Instead, a range of values was established using the 2022 Town assessments for tax purposes, the 2013 KRT

[3] Throughout this report, the term "parcel" rather than "lot" is used to describe the land leased to a cottage owner; the term 'lot" is generally understood to be a parcel that is "buildable" under a town's zoning laws. The majority of the Long Beach parcels do not have the required frontage to qualify as "lots" in any of Rockport's existing zones.

Appraisal performed for the Long Beach Facts & Considerations Report, and the 2010 appraisal performed for the Little Neck Ipswich sale.

A current appraisal of the individual parcels would likely cost between $90k and $120k.

2022 Tax Assessments

Total assessments on the parcels for 2022 was approximated as follows:

Location	Quantity	Typical Assessment ($1000s)	Total ($million)
Front Row	74	401.0	29.7
Second Row	55	201.3	11.1
Third Row	17	179.0	3.0
Accessory	3	10.5	0.0315
Total	149	-	43.8

2013 KRT Appraisal

Note that the KRT appraisal did not distinguish between second and third row parcels, calling them both “back row” parcels. The appraisal also did not make an allowance for the parcels being in a FEMA Special Hazard Flood Area.

Location	Quantity	Appraisal ($1000s)	Total ($million)
Front Row	74	664.5	49.2
Back Row	72	365.0	26.3
Accessory	3	91.3	0.2739
Total	149	-	75.7

2010 Little Neck Appraisal and Sale

Although the 210 Little Neck parcels are approximately the same size as those on Long Beach, only 37 are direct waterfront and of those, many are on mud flats rather than on beachfront. Unlike the Long Beach parcels, none of the Little Neck parcels are in a FEMA Special Hazard Flood Area, and all have street frontage. At the time of appraisal, Little Neck had town water, but had a sewage collection system requiring frequent pumping rather than being connected to the town sewage system.

Total appraisal was $42.5 million for a sale of individual parcels or to a tenants’ association, and $31.5 million for a sale to an unrelated third party with the existing tenants retaining possession

of their cottages. The 2012 sale to a tenants' association was for $31.4 million and resulted in lawsuits brought against the town by residents.

Valuations Used in Report

The following have been used for gross sales proceeds for comparative purposes:

- Lower bound ("worst case"): Town's assessed value of $43.8 million
- Nominal[4] value: KRT appraisal of $75.7 million
- Upper bound ("best case"): $113.6 million = 150% of KRT appraisal

According to several local real estate professionals, property values on Cape Ann have doubled since the 2013 KRT appraisal. Rather than doubling the appraisal, a more conservative upper bound was used.

The Little Neck sale was not used in the valuation of the Long Beach parcels because of the controversy surrounding the amount realized, and because it was deemed that the direct ocean front and greater access to a considerably bigger beach made the Long Beach parcels considerably more valuable.

NOTE: No one on the Long Beach Options Committee is a professional real estate appraiser, and none of the valuations above should be considered to be much more than a best effort valuation based on the information to which we had access.

[4]Throughout this report (and particularly in the financial analyses), "nominal" is used for want of a better term to describe a value which is neither the worst nor the best case, but is somewhere in between.

The Seawall[5]

Junction of 1959 and 1931 portions of seawall

Close-up of 1931 seawall showing current condition

[5] The history of the seawall is adapted from the 2013 Long Beach Facts & Considerations report.

History

The first Long Beach seawall was built in 1931, replacing a wooden bulkhead that was destroyed by fire and storms the previous year. The cost of the 3,350' project was $50,000 and was funded by the Town and the Commonwealth of Massachusetts.

In March of 1958, a storm lasting several days combined with an excessively high tide washed the sand away from the base of the seawall causing much of it to topple over. Over the next few days, sand was eroded in front of the cottages.

Replacement of 1600 feet of the 1931 seawall was funded by the Commonwealth of Massachusetts and completed in 1959. The cost was approximately $250,000.

Subsequent storms in 1976, 1985 and 1991 caused further damage to the seawall and eroded the fill behind it. Repairs were funded by the Town, the State and FEMA, with FEMA reimbursing 75% of the total.

In 2012, a proposal to accomplish a more complete rebuilding of the wall at a cost of $13 million was furnished by Vine Engineering/GZA. Their seawall design, at just two feet higher than the current seawall, fell two feet short of FEMA's minimum recommendation. Before going ahead with the repairs, the Town awarded a contract to Applied Coastal Research & Engineering to thoroughly investigate the beach dynamics and explore other alternatives.

In its 2014 report, Applied Coastal listed the costs and benefits of seawall replacement, managed retreat, and beach nourishment with revetment (placement of large stones at the base of the seawall to help prevent washing away of sand). The report concluded that beach nourishment with revetment was the most cost effective approach if the cottages were to be protected and retained.

In its 2018 report, the Long Beach Infrastructure Committee recommended total replacement of the seawall -- at a cost estimated at $32 million if built in 2025. Adding beach nourishment and stone revetment would increase the total cost to $39 million.

Following a major storm in 2018 that threatened to undermine the seawall, the DPW applied for and received a grant from the Massachusetts Executive Office of Energy and Environmental Affairs for reinforcement of the seawall with 2,500 tons of revetment stone and beach nourishment of 8,000 cubic yards of sand. The work was completed in 2019. The Town's share of the $1 million project was $250,000.

Current Status

Although the 2018 beach nourishment and revetment is holding up well, according to the Rockport Department of Public Works the seawall itself is currently in need of approximately $3.3 million in repairs.

Proactive reconstruction of the seawall consisting of replacement of the remaining sections of the 1931 seawall and rebuild of the 1959 seawall is currently estimated by the DPW at $34 million including beach nourishment if the work is done in 2022. Assuming a 4% yearly increase in construction costs results in a cost of over $38.2 million in 2025 -- very close to the Long

Beach Infrastructure Committee's estimate. Reconstruction after failure would add about $1 million. Construction would take about 2 years. To date, there has been no decision to proceed.

2. Options Considered; Committee Comments and Conclusions

Introduction

Options considered by previous committees and studies for the future of Long Beach are: renewing the leases with or without changes, selling the parcels individually or as a whole, and taking the beach and dune back to nature.

The Long Beach Options Committee has reviewed and updated the previous studies, and added one more: Conditional Renewal of Leases ("Managed Retreat") – renewing the leases with additional changes to include climate change adaptation. A misunderstood and often maligned concept, Managed Retreat is, nonetheless, a viable and reasonable long-term option; it was, in fact, suggested in Rockport's 2020 Hazard Mitigation Report for consideration by the Town.

"Back to Nature" is the most problematic option for the Town's financial wellbeing, and is included in our study only because it was part of the original warrant article at the 2021 Spring Town Meeting that resulted in the formation of the Long Beach Options Committee.

In the following report, the advantages and risks for the Town for each option are described along with issues to be resolved should the option be chosen. The descriptions are then followed by financial comparisons.

Option 1a: Renewal of Current Ten-Year Leases Without Changes

Introduction. The most straightforward of all the options, renewal of the current ten-year leases is characterized as follows:

Advantages:

- Least likely of all options to have legal challenges from the lessees
- Lowest legal expenses to implement
- Continued income stream for the Town (with the assumption that all the cottages remain habitable)
    - Gross 10-year expected income (lease payments plus real estate taxes) approximately $32 million
    - Net 10-year expected revenue approximately $30 million
- Town retains ownership of parcels (and thus the entire barrier beach system)
- Town has additional time for long term research and planning before making irrevocable decisions

Disadvantage:

- Town is liable for seawall repair or replacement – could have significant impact on net revenue

Risks:

- According to Town Counsel, the Town is liable for damage to cottages due to "negligence," including damage resulting from seawall failure and flooding from behind
- A catastrophic event could destroy the cottages and result in reduced or no further lease or tax income for the Town

To Be Resolved:

- Should the seawall be proactively replaced or repaired before it suffers more damage?
- Should the Town acquire insurance to cover replacement of the seawall and or possible damages to the cottages?
- Can the Town's portion of the cost to make major repairs or replace the seawall be allocated to the lessees as betterments? (Question has been submitted to Town Counsel)
- Should leases for parcels currently at risk be renewed?

Option 1b: Renewal of Current Ten-Year Leases, but with Town Indemnified Against Losses Due to Seawall Failure, Beach Movement, Storm Damage and Other Climate-Change-Related Causes

Introduction. This option shares many of the same characteristics as renewal of the current leases without changes, but provides the Town protection against situations beyond its control.

Suggested features of new leases:

- Town to be indemnified against losses due to seawall failure, beach movement, storm damage or other climate-change-related causes
- Cottage owners to acknowledge that they are leasing parcels at their own risk

Advantages:

- Continued income stream (with the assumption that all the cottages remain habitable)
    - Gross 10-year expected income (lease payments plus real estate taxes) approximately $32 million
    - Net 10-year expected revenue approximately $30 million
- Town no longer liable for damage to cottages resulting from seawall failure, beach movement, storm damages and other climate-change-related causes
- Town retains ownership of parcels (and thus the entire barrier beach system)
- Town has additional time for long term research and planning before making irrevocable decisions

Disadvantages:

- Town is liable for seawall repair or replacement – could have significant impact on net revenue

Risk:

- Town could incur additional legal expenses negotiating the terms of the new lease
- A catastrophic event could destroy the cottages and result in reduced or no further lease or tax income for the Town

To Be Resolved:

- Should the seawall be proactively replaced or repaired before it suffers more damage?
- Should the Town acquire insurance to cover replacement of the seawall?
- Can the Town's portion of the cost to make major repairs or replace the seawall be allocated to the lessees as betterments? (Question has been submitted to Town Counsel)
- Should leases for parcels currently at risk be renewed?

Option 1c: Conditional Renewal of Leases with Additional Changes to Include Climate Change Adaptation ("Managed Retreat")

Introduction: Whatever the Town decides to do with respect to Long Beach, both the Town and the cottage owners eventually will have to contend with rising sea levels, increasing intensity and frequency of storms, and an aging seawall. While the term "managed retreat" is often viewed negatively — and, admittedly, the initial attempts of the Long Beach Options Committee to define it as an option did not help this impression — managed retreat has proven to be a fair, practical and relatively affordable way of dealing long term with issues similar to those that the Town is facing with Long Beach.

Suggested features of new leases

- Town to be indemnified against losses due to seawall failure, beach movement, storm damage or other climate-change-related causes
- Cottage owners to acknowledge that they are leasing parcels at their own risk
- Leases are to be reviewed or terminated if certain risk thresholds are reached
    - Safety of cottage owners is paramount
    - When a threshold is reached or exceeded, lease is terminated OR reviewed and renewed on a shorter basis
    - Thresholds are determined parcel-by-parcel
- Cottage owners will be required to notify prospective buyers of lease duration and conditions
- Town to repair seawall (but not replace or rebuild in its entirety) and provide beach nourishment as necessary

Advantages for cottage owners and potential buyers:

- Cottage owners have advance warning of potential for and conditions of early lease termination
- Prospective buyers are able to make informed decisions about risk of purchasing
- Town retains responsibility for seawall repair, beach nourishment

Advantages for the Town:

- Town has continuing (but slowly declining) income stream
- Town retains ownership of parcels (and thus the entire barrier beach system)
- Town has additional time for long term research and planning before making irrevocable decisions

Disadvantage for the Town:

- Town remains responsible for seawall repair, beach nourishment

Risks:

- A catastrophic event could destroy the cottages and result in no further lease or tax income for the Town
- Possibility of litigation if leases are terminated early

To be resolved:

- How and by whom are thresholds for early lease termination to be determined? (Expert professional help will be required)
- Should some leases either not be renewed or renewed for less than 10 years initially if one or more of the thresholds pertaining to those parcels have already been met?
- Should leases for parcels not currently under threat be renewed for more than 10 years?
- What happens if cottage owner refuses to remove their cottage after termination of lease?
- Should the Town consider voluntary buy-outs or granting of life estates with the help of state or federal funding?

Option 2a: Sell Individual Parcels with the Seawall (but not the beach) Included in the Sale

Introduction. The 2018 Settlement Agreement and Release grants certain rights to lessees to purchase the leased parcels should the Town decide to sell either with or without an offer from a third party. In either case, special state legislation will be required to authorize such a sale – this could take a year or more.

Selling the parcels individually is more problematic than selling all of them in a block to a single entity: surveys, appraisals and marketing of the individual parcels will be necessary and will be more expensive; legal fees including closing expenses will be higher; and sale of all the individual parcels may take a lengthy period of time rather than happening all at once. The seawall would likely have to be sold separately to an association of the new parcel owners after all the parcels are sold rather than to the new owners as individuals.

Suggested conditions of sale to include:

- Town and the public to have the right to pass on the seawall and its walkway and to access the beach over public ways including Long Beach, Saratoga Creek and Old County Roads, the firebreaks and access ways at both ends of the beach
- Cottage owners to bear the responsibility for maintaining/replacing the seawall
- Restrictions to be placed on allowable uses and structures

Advantages for the Town:

- Town would receive large inflow of cash from the sale
- Town would receive increased real estate tax income if the sale price is greater than assessed value
- Town would no longer be responsible for repairing/replacing the seawall of for damages to the cottages

Disadvantages for the Town:

- The beach system would be divided by ownership (dune separated from the beach and marsh) – long term repercussions for Rockport as a result of sea level rise and other climate-change-related issues
- The Town remains responsible for maintenance of Long Beach and Old County Roads
- A sale is irrevocable[6]

Risks:

- Lawsuits may result, including over rights to the beach
- Town could lose access to the beach as happened at Little Neck in Ipswich
- Cottage owners may not properly maintain the seawall (a private owners' association is not eligible for state or federal funding)
- Town residents might sue the Town for divesting of a valuable natural resource

[6] See Footnote 8 on page 27

To be resolved:

- Can the Town legally sell the parcels and seawall without including the beach? (Town counsel has advised that this **can** be done)
- What happens if all the parcels cannot be sold in a reasonable time?
- Should the Town repair the seawall before deeding it over?
- Should the sale prices of the parcels be discounted as a result of including the seawall in the sale?
- Should the Town retain ownership of the seawall? (If so, it would be the only Town-owned seawall abutting private property in Rockport)
- Would the parcels need to be realigned/modified/combined to allow individual parcel sales as lots?
- What zoning regulations/changes would be needed to allow individual parcel sales and to ensure restrictions on allowable uses and structures?
- Parking for many cottages is not currently on leased land. How should this issue be handled after a sale?

Option 2b: Sell as Single Parcel with the Seawall (but not the beach) Included in the Sale

Introduction. The 2018 Settlement Agreement and Release grants certain rights to a group of lessees to purchase the property as a whole should the Town decide to sell either with or without an offer from a third party. In either case, special state legislation will be required to authorize such a sale – this could take a year or more.

Selling all the parcels together with the seawall at the same time simplifies the selling process and makes it less expensive for the Town. Individual parcel surveys, appraisals and marketing will not be necessary and legal fees including closing expenses will be lower.

Suggested conditions of sale to include:

- Town and the public to retain the right to pass on the seawall, its walkway, Long Beach, Saratoga Creek and Old County Roads, the current firebreaks and access ways at both ends of the beach to access the beach
- Cottage owner association to bear the responsibility for maintaining/replacing the seawall
- Restrictions to be placed on allowable uses and structures

Advantages for the Town:

- Town would receive large inflow of cash from the sale
- Town would receive increased real estate tax income if the sale price is greater than assessed value
- Town would no longer be responsible for repairing/replacing the seawall or for damages to the cottages
- Selling to a single entity would mean that the sale would happen all at once and the Town would not be left with unsold parcels
- Required zoning changes would be considerably simplified

Disadvantages for the Town:

- The beach system would be divided by ownership (dune separated from the beach and marsh) – long term repercussions for Rockport as a result of sea level rise and other climate-change-related issues
- A single entity negotiating to purchase all the land may be in a stronger position than individual parcel purchasers
- A sale is irrevocable[7]

Risks:

- Lawsuits may result, including over rights to the beach
- Town could lose access to the beach as happened at Little Neck in Ipswich
- Cottage owner association may not properly maintain the seawall (a private owners' association is not eligible for state or federal funding)
- Town residents might sue the Town for divesting of a valuable natural resource

[7] See footnote 8 on page 27

To be resolved:

- Can the Town legally sell the land and seawall without including the beach? (Town counsel has advised that this **can** be done)
- Should the Town repair the seawall before deeding it over?
- Should the sale price be discounted as a result of including the seawall in the sale?
- Should the Town retain ownership of the seawall? (If so, it would be the only Town-owned seawall abutting private property in Rockport)
- What zoning regulations/changes would be needed to ensure restrictions on allowable uses and structures?

Option 3 -- "Back to Nature" – Do Not Renew Leases, Remove the Cottages, Seawall and Utility Infrastructure.

Introduction. The "Back to Nature" option is the most extreme of all the options considered, and has the greatest negative impact on the financial wellbeing of the Town. Originally the focus of Warrant Article X at the 2021 Spring Town Meeting, a vote on the article funding a study of "Back to Nature" was postponed until the 2022 Spring Town Meeting and the article amended to include the formation of the Long Beach Options Committee.

Advantages to the Town:

- Town would no longer have to repair or replace the seawall
- Rockport citizens would continue to own (without challenge) the largest beach in town – one of the Town's most valuable natural assets
- Town residents could not sue the Town for selling one of the Town's most valuable natural assets
- Once the cottages and the seawall are removed, the beach, dune and marsh will again function as a system (less beach nourishment will likely be necessary) and naturally adapt to climate change
- After settling any resulting lawsuits, there would never be another one

Disadvantages to the Town:

- Lawsuits brought by the cottage owners would likely result and could tie the Town up in courts for a long time as well as being very expensive
- Income stream from parcel leases and real estate taxes would cease abruptly and completely at the end of 2023

To be resolved:

- Should cottage owners be compensated for the loss of their cottages? If so, is federal or state funding available? What would the Town's share of the expense be?
- Is federal or state funding available for removal of the cottages if the owners abandon them? What would the Town's share of the expense be?
- Should the Town develop the beach similar to Good Harbor Beach?
    - What would it cost, and what would be the expected revenue?
    - How and where could parking and facilities be developed?
    - How could the Town gain its own access to the beach, avoiding entering through the current toll road?

Committee Comments

Back to Nature. For the reasons stated above, the Committee agrees with the Board of Selectmen that the Back to Nature option should not be pursued.

Sale of the Parcels. Two options for sale were considered: as individual parcels, and as a single parcel to a single entity.

Both options suggest including the seawall in the sale – not doing so would result in continued future expense to the Town for seawall repair or replacement and risk of exposure to liability for damages to cottages resulting from seawall failure. If the Town were to sell the parcels without the seawall included, it would be Rockport's only Town-owned seawall directly abutting private property.

If the Town were to proactively replace the seawall before deeding it over, government funding is unlikely; generally, FEMA funding is available only to help with rebuilding after failure. As a result, the Town's cost to replace the seawall could be $40 million or higher. This would reduce the Town's proceeds from the sale significantly.

A more affordable option would be to make only those repairs necessary at this time – approximately $3.3 million – before deeding the seawall over.

While the large influx of cash from a sale is enticing, a sale is final[8], and would result in the Town losing control of the area -- there is also a risk that the Town would not be able to retain access to and use of the beach.

Further, as shown in the following hypothetical examples, the Town would lose the lease income and replace it only with increased tax revenue on the parcels:[9]

- **2022 assessed value of parcels** is approximately $44 million, yielding taxes of $440k (assuming the current tax rate of approximately $10 per $1000 valuation); Lease income for 2024 will be $1.9 million, for a total income of $2.34 million.
- **Example 1: Sell parcels for $44 million,** yielding tax revenue of $440k (no increased tax income); the loss of lease income results in $1.9 million less total income in 2024
- **Example 2: Sell parcels for $75 million,** yielding tax revenue of $750k ($310k increased tax income), resulting in $1.59 million less total income in 2024
- **Example 3: Sell parcels for $100 million,** yielding tax revenue of $1 million ($560k increased tax income), resulting in $1.34 million less total income in 2024

[8] It has been suggested that a sale could be accomplished with a "reversionary interest" that would return ownership to the Town if certain events (e.g., the parcel becomes unsuitable for habitation) occur. The practicality of this is questionable, especially if the seawall is included in a sale. If the parcels were sold individually, the Town would assume ownership of individual parcels that met the reversionary criteria, and thus become a party to maintaining the seawall. In the case of the sale of the whole area as a single parcel, it would be difficult to determine when the Town re-takes ownership -- do all the parcels have to meet the criteria?

[9] Note that the increased tax revenue is for the parcel assessments only and does not include taxes on the cottages themselves

To make up the difference in income the following amounts would have to be invested at 3% annual return:

- **Example 1:** over $63 million
- **Example 2:** $53 million
- **Example 3:** over $44 million

In each case, it is clear that the Town would realize a net useable infusion of capital considerably lower than the amount realized in a sale. Of course, if the Town did not invest all the proceeds, or if the investment rate was either more or less than 3%, the results would be quite different.

An argument in favor of selling is that if the leases were renewed and then very shortly thereafter a storm wiped out most if not all of the cottages, the Town would be left with little or no income; if a storm occurred shortly after a sale, however, the Town would lose the tax income but would still have the proceeds from the sale.

Note that upon sale, regardless of any zone assigned to the area, the parcels would be in the Coastal Flood Plain Overlay District, whose stated purposes are:

> *1. To provide that land in the Town of Rockport subject to seasonal or periodic flooding as described hereinafter shall not be used in such a manner as to endanger the health or safety of the occupants thereof, or of the public generally, or as to burden the public with cost resulting from unwise individual choices of land use.*
>
> *2. To assure the continuation of the natural flow pattern of the of the water courses within the Town and to minimize the impact of coastal storms in order to protect persons and property against the hazards of flood inundation.*

We should keep these purposes in mind as the Town decides whether or not to sell the parcels.

If a decision to sell the parcels is made, the Committee strongly urges the Town to include the seawall in the sale.

Renewal of Leases. Of the three scenarios presented for renewing the leases, the one with the greatest financial risk for the Town is renewing the leases without changes. Not only does the Town remain responsible for repair or replacement of the seawall, the current lease also holds the Town responsible should damages to the cottages result from failure of the seawall or from flooding from the marsh side.

Adding changes to the leases that grant indemnification to the Town for damages resulting from climate-change-related events (seawall failure, storms, etc.), and that make it clear that the cottage owners are leasing their parcels at their own risk improve the situation, but do not provide the flexibility that the Town will need in the future. Eventually it will become too expensive for the Town to maintain or replace the seawall, and too dangerous for lessees to occupy their cottages. The Town will not be able to provide emergency services as a result of flooding of Long Beach, Saratoga Creek and Old County Roads.

The conditional lease renewal option ("Managed Retreat") would add clauses that provide climate change adaptation through termination of individual leases based on reaching thresholds of risk; the cottage owners and the Town would then be protected from unexpected financial harm. Barring a catastrophic event such as a hurricane, this process might well occur over quite a long time, allowing the lessees many years of enjoyment of their cottages and the Town many years of income.

For these reasons, the Committee recommends this lease renewal option to the exclusion of the other two lease renewal options[10]. If the Town chooses to renew the leases without changes, then insurance to cover potential damages to the cottages should be obtained if not already in place.

An argument in favor of lease renewal is that if most or all of the cottages remain unharmed for many years, the lease income ($1.9 million in 2024 and increasing every year by 4%) would continue, whereas the proceeds of a sale would eventually be exhausted by making up the lost lease income and being used for other purposes.

[10] A minority of the Committee questioned this recommendation.

Conclusions

In many ways, the work of the Committee has raised more questions than it has answered.

A decision on the future of Long Beach – particularly an irrevocable decision – should not be made without a thorough study of all the issues – economic, legal, scientific, social, even ethical, and the long term vision for our town. This will require much more than just the efforts of a part-time volunteer committee working with limited resources.

To make this happen, we prepared an expression of interest (EOI) as the first step in applying for a grant from the state's Municipality Vulnerability Program (MVP) to fund just such a study run by professionals. The deadline for submission was missed, but there is still time to submit an application. Federal and state adaptation and resilience grants are currently plentiful, and the Town is actively pursuing an MVP grant for the study. Carri Hulet, a seasoned consultant who has successfully worked on similar programs, has been contracted to write the Town's proposal.

Since time is running out – the Selectmen have only a little more than a year and a half to make a decision, decide on the terms, negotiate with the cottage owners and then get approval from the Town's voters – it may make the most sense to simply renew the existing leases for a two year period. This would allow time for the study and the Selectmen to make a decision and then proceed without committing to a much longer lease period.

Probably the most important thing that has come out of our Committee's work is the need to prepare ALL of Rockport, not just Long Beach, for rising sea levels and stronger, more frequent storms – climate change is real and is here.

The Town's 2020 Hazard Mitigation Plan funded by the MVP was a great start, but it needs follow up. An MVP-funded study of Long Beach study will be a big part of continuing that effort.

3. Financial Comparison of Options

Introduction

Without being able to predict the future, and with so many unknowns (cost of seawall replacement, valuations of parcels, availability of state and federal funding, prediction of Town expenses, timing of events, etc.), an accurate financial comparison of the options is difficult at best. However, by using ranges and estimating expenses and income over a ten year period (rather than yearly) and making certain other assumptions, relative comparisons can be made based on estimates for best and worst case scenarios.

An important assumption used for the financial comparison of all options (except for Option 3) is that all the cottages remain habitable and produce lease and real estate tax income for the entire 10 year period.

Details of income and expenses for each option are shown in the following section. Further details are shown in the spreadsheets for the options found in Appendix A1.

Summary Comparisons

Option 1a – Renew 10-year leases without changes

- Best case 10-year net income: $30.8 million
- Worst case 10-year next income: $19.4 million
- Nominal[11] 10-year net income: $29.7 million

Option 1b – Renew 10-year leases with changes

- Best case 10-year net income: $30.7 million
- Worst case 10-year next income: $19.3 million
- Nominal 10-year net income: $29.6 million

Option 1c – Conditional Renewal of Leases

- Best case 10-year net income: $30.7 million
- Worst case 10-year next income: $29.0 million
- Nominal 10-year net income: $29.3 million

Option 2a -- Sell Individual Parcels

- Best case 10-year net income: $130 million
- Worst case 10-year next income: $52 million
- Nominal 10-year net income: $87million

Option 2b -- Sell Leased Land as Single Parcel

- Best case 10-year net income: $138 million

[11] Throughout this report (and particularly in the financial analyses), "nominal" is used for want of a better term to describe a value which is neither the worst nor the best case, but is somewhere in between.

- Worst case 10-year next income: $55 million
- Nominal 10-year net income: $93 million

Option 3 -- Back to Nature[12]

- Best case 10-year net income: $5.2 million loss
- Worst case 10-year next income: $22.3 million loss
- Nominal 10-year net income: $13.7 million loss

[12] This does not include expenses for developing the beach or income that might be derived from a developed beach. See Appendix A1, Option 3 for that analysis.

Detail of Income and Expenses for the Options

Further details are shown in the spreadsheets for the options found in Appendix A1.

Option 1a – Renew 10-year leases without changes.

- **Total 10-year income: $31.9 million (all cases)**
  - 10 year lease income: $22.9 million
    - Based on 2023 income ($1.83 million) as provided by Finance Committee and increased by 4% per year as per 2018 Settlement Agreement and Release
  - 10 year real estate tax income: $9.0 million
    - Based on 2020 total ($725k) as provided by Finance Committee and increased by 2.5% per year

- **Best case 10-year expenses: $1.1 million**
  - Assumption: beach nourishment (no seawall repairs) required at end of 5 year period; Town's share (net of Federal and State funding) = $775k = 25% of $3.1 million (estimate provided by Rockport DPW)
  - Debt service = $116.3k = $775k at 3% for 5 years
  - Legal expense estimated at $4k (10 hrs at $400/hr)
  - Other = $200k = $20k/yr maintenance and other expenses

- **Worst case 10-year expenses: $12.5 million**
  - Assumption: Seawall replacement and beach nourishment needed at beginning of 10-year leases. Town's share (net of Federal and State funding) = $8.5 million = 25% of $34 million (estimate provided by DPW). Second beach nourishment at end of Year 5; Town's share =$775k
  - Debt service = $8.5 million at 3% for 10 years + $775k at 3% for 5 years = $2.55 million + $116.3k = $2.67 million
  - Legal expense estimated at $16k (40 hrs at $400/hr)
  - Other = $500k = $50k/yr maintenance and other expenses

- **Nominal 10-year expenses: $2.2 million**
  - Assumption: Seawall repairs and beach nourishment needed at end of Year 5 of leases. Town's share = $775k + Town's share of major seawall repair (net of Federal and State funding) ($825K = 25% of $3.3 million DPW estimate) = $775k + $825k = $1.6 million
  - Debt service = $240k at 3% for 5 years
  - Legal expense = $10k = average of Best Case and Worst Case expenses
  - Other = $350k = average of Best Case and Worst Case expenses

- **Net income:**
  - Best case (Total income less best case expenses) = $30.8 million
  - Worst case (Total income less worst case expenses) = $19.4 million
  - Nominal (Total income less nominal expenses) = $29.7 million

Option 1b – Renew 10-year leases with changes.

- **Total 10-year income: $31.87 million all cases** (same as Option 1a)

- **Best case 10-year expenses: $1.1 million**
  - Assumption: Beach nourishment (no seawall repairs) required at end of Year 5 of lease; Town's share = $775k (same as Option 1a)
  - Debt service = $116.3k (same as Option 1a)
  - Legal expense estimated at $48k (120 hrs at $400/hr) for negotiating lease changes
  - Other = $200k (same as Option 1a)

- **Worst case 10-year expenses: $12.5 million**
  - Assumption: Seawall replacement and beach nourishment needed at beginning of 10-year leases. Town's share = $8.5 million. Second beach nourishment at end of Year 5; Town's share =$775k (same as Option 1a)
  - Debt service = $2.67 million (same as Option 1a)
  - Legal expense estimated at $96k (240 hrs at $400/hr) for negotiating lease changes
  - Other = $500k (same as Option 1a)

- **Nominal 10-year expenses: $2.26 million**
  - Assumption: Seawall repairs and beach nourishment required at end of Year 5. Town's share = $1.6 million (same as Option 1a)
  - Debt service = $240k at 3% for 5 years (same as Option 1a)
  - Legal expense = $72k = average of Best Case and Worst Case expenses
  - Other = $350k = average of Best Case and Worst Case expenses

- **Net income:**
  - Best case (Total income less best case expenses) = $30.7 million
  - Worst case (Total income less worst case expenses) = $19.3 million
  - Nominal case (Total income less nominal expenses) = $29.6 million

Option 1c – Conditional Renewal of Leases

- **Total 10-year income: $31.87 million** (same as Option 1a)

- **Best case 10-year expenses: $1.25 million**
  - Assumption: Beach nourishment (no seawall repairs) required at end Year 5 of lease; Town's share = $775k (same as Option 1a)
  - Debt service = $116.3k (same as Option 1a)
  - Legal expense estimated at $160k (400 hrs at $400/hr) for negotiating lease changes
  - Other = $200k (same as Option 1a)

- **Worst case 10-year expenses: $3.8 million**
  - Assumption: Seawall repair and beach nourishment needed at beginning of 10-year leases. Town's share (net of Federal and State funding) = 25% of $3.3 million (seawall repair) plus 25% of $3.1 million = $825K + $775k = $1.6 million. Second beach nourishment at end of Year 5; Town's share =$775k; Total = $2.375 million
  - Debt service = $1.6 million at 3% for 10 years + $775k at 3% for 5 years = $480k + $116.3k = $596k
  - Legal expense estimated at $320k (800hrs at $400/hr) for negotiating lease changes
  - Other = $500k (same as Option 1a)

- **Nominal 10-year expenses: $2.59 million**
  - Assumption: Seawall repairs and beach nourishment required at end of Year 5. Town's share = same as worst case = $1.6 million
  - Debt service = $240k = $1.6 million at 3% for 5 years (same as Option 1a)
  - Legal expense = $240k = average of Best Case and Worst Case expenses
  - Other = $350k = average of Best Case and Worst Case expenses

- **Net income:**
  - Best case (Total income less best case expenses) = $30.7 million
  - Worst case (Total income less worst case expenses) = $29.0 million
  - Nominal case (Total income less nominal expenses) = $29.3 million

Option 2a -- Sell Individual Parcels

Note -- in each case:

- Total 10 Year Proceeds = Net Sales Proceeds plus 10 Year Property Tax Income
- Net Sales Proceeds = Gross Sales Proceeds less Sales Expenses

Because of the wide difference between Best Case and Worst Case, a Nominal Case is also presented. See spreadsheets in the Appendices for more details and further information.

- **Best case total 10 year proceeds:** $130 million
  - **Best case net sales proceeds:** $113.4 million
    - **Best case gross sales proceeds:** $113.6 million
      - Based on 150% of 2013 KRT Appraisal
    - **Best case sales expenses:** $202.8k
      - Survey: $60k (2013 Town budget amount)
      - Legal fees: $52.8k (per R. Visnick)
      - Appraisals: $90k (per Tyburski Appraisal Service)
  - **10 year property tax income:** $16.1 million
    - Based on 1% of 2021 assessed cottage values plus 1% of best case gross sales proceeds

- **Worst case total 10 year proceeds:** $52 million
  - **Worst case net sales proceeds:** $43.5 million
    - **Worst case gross sales proceeds:** $43.8 million
      - Based on 2022 Town appraisals of parcels
    - **Worst case sales expenses:** $367k
      - Survey: $120k (twice 2013 Town budget amount)
      - Legal fees: $127 (per R. Visnick)
      - Appraisals: $120k (per Tyburski Appraisal Service)
  - **10 year property tax income:** $8.3 million
    - Based on 1% of 2021 assessed cottage values plus 1% of worst case gross sales proceeds

- **Nominal total 10 year proceeds:** $87 million
  - **Nominal net sales proceeds:** $75.4 million
    - **Nominal gross sales proceeds:** $75.7 million
      - Based on 100% of 2013 KRT Appraisal
    - **Nominal sales expenses:** $284.9k
      - Survey: $90k (per Town Administrator)
      - Legal fees: $89.9 (average of best and worst cases)
      - Appraisals: $105k (average of best and worst cases)
  - **10 year property tax income:** $11.9 million
    - Average of best and worst cases

Option 2b -- Sell as Single parcel

The financial analysis shown here is for a sale to a single entity comprised primarily of current cottage owners; an analysis for a sale to an unrelated entity can be found in Appendix A1.

Note -- in each case:

- Total 10 Year Proceeds = Net Sales Proceeds + 10 Year Property Tax Income
- Net Sales Proceeds = Gross Sales Proceeds less Sales Expenses

Because of the wide difference between Best Case and Worst Case, a Nominal Case is also presented. See spreadsheets in the Appendices for more details and further information.

- **Best case total 10 year proceeds:** $138 million
  - **Best case net sales proceeds:** $120.8 million
    - **Best case gross sales proceeds:** $121.0 million
      - Based on 150% ok 2013 KRT Appraisal
      - Includes all Town-owned land at Long Beach -- see spreadsheet
    - **Best case sales expenses:** $143k
      - Survey: $20k (see spreadsheet)
      - Legal fees: $63k (per R. Visnick)
      - Appraisals: $60k (per Tyburski Appraisal Service)
  - **10 year property tax income:** $17.0 million
    - Based on 1% of best case gross sales proceeds plus 1% of 2021 assessed cottage values

- **Worst case total 10 year proceeds:** $55 million
  - **Worst case net sales proceeds:** $46.4 million
    - **Worst case gross sales proceeds:** $46.7 million
      - Based on 2022 Town appraisals of parcels
    - **Worst case sales expenses:** $232k
      - Survey: $30k (see spreadsheet)
      - Legal fees: $112 (per R. Visnick)
      - Appraisals: $90k (per Tyburski Appraisal Service)
  - **10 year property tax income:** $8.6 million
    - Based on 1% of worst case gross sales proceeds plus 1% of 2021 assessed cottage values

- **Nominal total 10 year proceeds: $93 million**
  - **Nominal net sales proceeds: $80.5 million**
    - **Nominal gross sales proceeds: $80.6 million**
      - Based on 100% of 2013 KRT Appraisal
    - **Nominal sales expenses: $187.5k**
      - Survey: $25k (estimate)
      - Legal fees: $87.5k (average of best and worst cases)
      - Appraisals: $75k (average of best and worst cases)
  - **10 year property tax income: $12.4 million**
    - Average of best and worst cases

Option 3 – Back to Nature

The financial analysis shown here does not encompass development into a beach recreational area similar to Good Harbor Beach in Gloucester; that analysis can be found in Appendix A1.

- **Best case net 10-year income: $5.2 million loss[13]**
  - **Best case income: $0**
  - **Best case 10 year estimated costs: Town's share = $5.2 million**
    - Removal of seawall, utilities, pumping station: $5.83 million[14]
    - Construction oversight: $1.2 million[8]
    - Environmental remediation: $220k[15]
    - Removal of abandoned buildings: $1.8 million[16]
    - Beach nourishment: $3.1 million[17]
    - Legal fees: (200 hrs at $400/hr): $80k
    - Litigation costs, damages: $2.04 million[18]
    - Assumes Town receives grants for 75% of all costs except for legal fees and litigation, damages

- **Worst case net 10-year income: $22.3 million loss**
  - **Worst case income: $0**
  - **Worst case 10 year estimated costs: $22.3 million**
    - Removal of seawall, utilities, pumping station: $5.85 million[19]
    - Construction oversight: $1.8 million[20]
    - **Environmental remediation: $440k[21]**
    - Removal of abandoned buildings: $3.8 million[22]
    - Beach nourishment: $6.2 million
    - Legal fees: (2400 hrs at $400/hr): $160k
    - Litigation costs, damages: $4.08 million[23]
    - Assumes Town receives no grant funding

- **Nominal 10-Year Net income estimated as average of Best and Worst Case Net Income: $13.7 million loss**

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[13] The first 5 cost items might qualify for !00% Federal funding, resulting in a "Best-Best" case loss of $2.1 million
[14] Based on DPW estimate for removal of seawall and utilities ($5.8 million) and Long Beach Facts & Considerations (LBF&C) report for pumping station removal
[15] From LBF&C report
[16] 150 cottages at $12k each
[17] One 50,000 cu yd beach nourishment
[18] From LBF&C report
[19] Based on DPW estimate for removal of seawall and utilities ($5.8 million) and 200% of (LBF&C) report estimate for pumping station removal
[20] 150% of LBF&C report estimate
[21] 200% of LBF&C report estimate
[22] 150 cottages at $25k each
[23] 200% of LBF&C report estimate

4. Appendices

Appendix A1 – Spreadsheets

Option 1a – Renew Leases Without Changes

Option: 1a -- Renew 10 Year Leases (I All figures in $1000's (e.g., 1,907.7 represents $1,907,700)

10 Year Income

Year	Leases(1)			Taxes(2)			**Total**			
	Min.	Nom.	Max.	Min.	Nom.	Max.	**Min.**	**Nom.**	**Max.**	2020 taxes
2024	1,907.7	1,907.7	1,907.7	800.3	800.3	800.3	2,708.0	2,708.0	2,708.0	2023 leases
2025	1,984.0	1,984.0	1,984.0	820.3	820.3	820.3	2,804.3	2,804.3	2,804.3	tax inc. 1
2026	2,063.4	2,063.4	2,063.4	840.8	840.8	840.8	2,904.2	2,904.2	2,904.2	tax inc. 2
2027	2,145.9	2,145.9	2,145.9	861.8	861.8	861.8	3,007.7	3,007.7	3,007.7	tax inc. 3
2028	2,231.8	2,231.8	2,231.8	883.3	883.3	883.3	3,115.1	3,115.1	3,115.1	
2029	2,321.1	2,321.1	2,321.1	905.4	905.4	905.4	3,226.5	3,226.5	3,226.5	repair cost
2030	2,413.9	2,413.9	2,413.9	928.1	928.1	928.1	3,342.0	3,342.0	3,342.0	
2031	2,510.5	2,510.5	2,510.5	951.3	951.3	951.3	3,461.7	3,461.7	3,461.7	
2032	2,610.9	2,610.9	2,610.9	975.0	975.0	975.0	3,585.9	3,585.9	3,585.9	
2033	2,715.3	2,715.3	2,715.3	999.4	999.4	999.4	3,714.7	3,714.7	3,714.7	
Totals	22,904.5	22,904.5	22,904.5	8,965.7	8,965.7	8,965.7	31,870.2	31,870.2	31,870.2	

10 Year Expenses

	Best Case	**Nominal**	**Worst Case**		
Seawall/Sand (3)	775.0	1,600.0	9,275.0		
Legal (4)	4.0	10.0	16.0		
Debt service (5)	116.3	240.0	2,666.3	Borrowing rate	0.03
Other (6)	200.0	350.0	500.0		
Total	1,095.3	2,200.0	12,457.3		

10 Year Net

Worst Case (8)	**Nominal (9)**	**Best Case (10)**
19,412.9	**29,670.2**	**30,774.9**

Risks: Town is liable for damage to cottages from failure of seawall (7); could result in lawsuits and damages

Notes:

(1) 2024 lease figures 4% higher than 2023 lease amount (Laurene Wessel 9-22-21); subsequent yearly lease amounts 4% higher than previous year (per 2018 lease settlement agreement)

(2) Minimum taxes equal to 2.5% yearly increase year-by-year for 2024, 2023, 2022 and 2021 over 2020 tax amount (725K, most recent available per Laurene Wessel 9-22-21) then increased by 2-1/2% over previous year; same formula for nominal taxes using tax rate inc. 2; same for maximum taxes using tax rate inc. 3.

(3) Best Case seawall expense for beach nourishment and revetment only estimated at $3.1 million (DPW Jan. 2022) to occur at the end Year 5 of the lease; Town's share set to 25%. Worst Case expense for seawall replacement estimated at $34 million (DPW Jan. 2022) to occur at beginning of 10 year lease and an additional beach nourishment at the end of Year 5 of the lease; Town's share set to 25%.Nominal cost: major seawall repair and beach nourishment to occur at end of year 5 of the lease = 25% of ($3.3 million +$3.1 million)

(4) Best Case legal expense estimated for new lease preparation (10 hrs @ $400/hr); Worst Case estimated at 40 hrs @ $400/hr.

(5) Best Case: expenditures for seawall/sand at end of Year 5; Worst Case if seawall/sand expenditures needed at beginning of Year 1; Nominal: seawall/sand expenditures occuring at end of Year 5; simple interest at rate above. All other expenses

(6) Best Case estimated at $20k wall and other maintenance per year; Worst Case estimated at $50k per year; Expected =

(7) Per Article 6.3 of lease agreement and confirmed by Town Administrator and Town Counsel 8-13-21.

(8) Worst Case 10 Year Net = Minimum 10 Year Income less Worst Case 10 Year Expenses

(9) Expected 10 Year Net = Expected 10 Year Income less Expected 10 Year Expenses

(10) Best Case 10 Yesr Net = Maximum 10 Year Income less Best Case 10 Year Expenses

Option 1b – Renew Leases with Changes

Option 1b -- Renew 10 Year Leases (Change Town liability clause)
All figures in $1000's (e.g., 1,907.7 represents $1,907,700)

10 year income exactly same as Option 1a:

	Minimum	**Nominal**	**Maximum**
	31,870.2	31,870.2	31,870.2

10 Year Expenses

	Best Case	**Nominal**	**Worst Case**
Seawall/Sand (3)	775.0	1,600.0	9,275.0
Legal (7)	48.0	72.0	96.0
Debt service (5)	116.3	240.0	2,666.3
Other (6)	200.0	350.0	500.0
Total	1,139.3	2,262.0	12,537.3

10 Year Net	**Worst Case (8)**	**Nominal(9)**	**Best Case (10)**
	19,332.9	29,608.2	30,730.9

Risks: **Litigation could result in still higher legal costs**

Notes:

(3),(5),(6) See corresponding notes for Option 1a

(7) Legal expenses could potentially be higher because of removal of Town liability clause in leases:

	Best Case	**Nominal**	**Worst Case**		
Hours	120.0	180.0	240.0	Billing rate	0.4
Total $k	48.0	72.0	96.0		

(8) Worst Case 10 Year Net = Minimum 10 Year Income less Worst Case 10 Year Expenses

(9) Nominal 10 Year Net =Nominal10 Year Income less Nominal 10 Year Expenses

(10) Best Case 10 Yesr Net = Maximum 10 Year Income less Best Case 10 Year Expenses

Option 1c – Conditional Renewal of Leases

Option 1c -- Conditional Renewal of Leases

10 year income exactly same as Option 1a (1):

	Minimum	Nominal	Maximum
	31,870.2	31,870.2	31,870.2

10 Year Expenses

	Best Case	Nominal	Worst Case
Seawall/Sand (2)	775.0	1,600.0	2,375.0
Legal (7)	160.0	240.0	320.0
Debt service (5)	116.3	400.0	596.3
Other (6)	200.0	350.0	500.0
Total	1,251.3	2,590.0	3,791.3

10 Year Net	**Worst Case (8)**	**Nominal(9)**	**Best Case (10)**
	28,078.9	29,280.2	30,618.9

Risks: **Litigation could result in still higher legal costs**

Notes:

(1) In order to make a valid comparison of the three renew lease options, it is assumed that the cottages all survive for the ten year period

(2) Best Case seawall expense for beach nourishment and revetment only estimated at $3.1 million (DPW Jan. 2022) to occur at the end Year 5 of the lease; Town's share set to 25%. Worst Case expense for seawall repair estimated at $3.3 million (DPW Jan. 2022) to occur at beginning of 10 year lease and an additional beach nourishment at the end of Year 5 of the lease; Town's share set to 25%.Nominal cost: major seawall repair and beach nourishment to occur at end of year 5 of the lease = 25% of ($3.3 million +$3.1 million)

(5),(6) See corresponding notes for Option 1a

(7) Legal expenses estimated as follows:

	Best Case	Expected	Worst Case		
Hours	400.0	600.0	800.0	Billing rate	0.4
Total $k	160.0	240.0	320.0		

(8) Worst Case 10 Year Net=Minimum 10 Year Income less Worst Case 10 Year Expenses

(9) Nominal 10 Year Net = Nominal 10 Year Income lessNominal 10 Year Expenses

(10) Best Case 10 Yesr Net = Maximum 10 Year Income less Best Case 10 Year Expenses

Option 2a – Sell Individual Parcels

Option 2a -- Sell individual parcels **All figures in $1000's (e.g., 1,907.7 represents $1,907,700)**

	Individual Values by Type	Front Row Lots	Second Row Lots	Third Row Lots	Accessory Lots	
2022 Assessment	Minimum (1)	401.0	201.3	179.0	10.5	
KRT Appraisal	Mid (2)	664.5	365.0	365.0	91.3	
KRT x 1.5	Maximum (3)	996.8	547.5	547.5	137.0	Multiplier

Quantity by Type	Front Row Lots	Second Row Lots	Third Row Lots	Accessory Lots
Quantity (4)	74	55	17	3

	Total Values by Type	Front Row Lots	Second Row Lots	Third Row Lots	Accessory Lots	**Totals**
2022 Assessment	Minimum	29,674.0	11,071.5	3,043.0	31.5	**43,820.0**
KRT Appraisal	Mid	49,173.0	20,075.0	6,205.0	273.9	**75,726.9**
KRT x 1.5	Maximum	73,759.5	30,112.5	9,307.5	410.9	**113,590.4**

Gross Sales Proceed	**Worst Case**	**Mid**	**Best Case**
	43,820.0	**75,726.9**	**113,590.4**

Sales Expenses

	Best Case	**Average**	**Worst Case**
Survey (5)	60.0	90.0	120.0
Title Exam (6)	2.0	6.0	10.0
Legal Fees (7)	20.0	30.0	40.0
Appraisal (8)	90.0	105.0	120.0
Closings (9)	30.8	53.9	77.0
Total	202.8	284.9	367.0

Net Sales Proceeds	**Worst Case (10)**	**Mid (11)**	**Best Case (12)**		
	43,453.0	**75,442.0**	**113,387.6**		-

Additional 10 Year Income

	Worst Case	**Mid**	**Best Case**		
Property tax (13)	8,325.5	11,900.2	16,142.2		
Interest	-	-	-	int rate	0
Total	8,325.5	11,900.2	16,142.2		

10 Year Total	**Worst Case (14)**	**Mid (15)**	**Best Case (16)**
	51,778.5	**87,342.2**	**129,529.7**

Notes:

(1) Typical Values per 2021 Town tax asessments

(2),(4) From Long Beach Facts and Considerations report; second and third row lots were valued equally

(3) Maximum value = Mid value times multiplier

(5) Best Case = 2013 Town budgeted amount; Average = Town Administrator's estimate; Worst Case = twice best case

(6),(7),(9) Per R. Visnick, Esq., Nov. 2021

(8) Per discussion with Mark Tyburski, Tyburski Appraisal Service, Hingham, MA

(10) Worst Case Net Proceeds = Worst Case Gross Proceeds less Worst Case Expenses

(11) Mid Net Proceeds = Mid Gross Proceeds less Average Expenses

(12) Best Case Net Proceeds = Best Case Gross Proceeds less Best Case Expenses

(13) See Option 1a, Note 2; taxes based on gross land sales proceeds+total assessed 2021 building values; assessed building values estimated as follows:
Total 2021 taxes = approx. 1% x total assessed (land value + total building value) = 743.125
Total assessed building value = (100 x 2021 taxes) less total assessed land value
Total assessed building value = (100 x 743.125) -41,725.2
= 30,492.50

(14) Worst Case 10 Year Total = Worst Case Net Proceeds plus Worst Case Additional 10 Year Income

(15) Mid 10 Year Total = Mid Net Proceeds plus Mid Additional 10 Year Income

(16) Best Case 10 Year Total = Best Case NetProceeds plus Best Case Additional 10 Year Income

Option 2b – Sell as Single Parcel

Option 2b -- Sell to single entity primarily comprised of current lease holders
All figures in $1000's (e.g., 1,907.7 represents $1,907,700)

	Worst Case	Nom.	Best Case	
Total lot values	43,820.0	75,726.9	113,590.4	
Add'l Town-owned land (1)	2,845.45	4,917.33	7,376.00	0.064935065
Total Gross Proceeds	**46,665.5**	**80,644.2**	**120,966.3**	

Sales Expenses	**Best Case**	**Nom.**	**Worst Case**	
Survey (2)	20.0	25.0	30.0	
Title Exam (3)	2.0	6.0	10.0	hourly rate
Legal Fees (4)	60.0	80.0	100.0	400
Appraisal (5)	60.0	75.0	90.0	
Closing Costs (6)	1.0	1.5	2.0	
Total Cost of Sales	**143.0**	**187.5**	**232.0**	

Net sales proceeds	**Worst Case (7)**	**Nom. (8)**	**Best Case (9)**
	46,433.5	**80,456.7**	**120,823.3**

Additional 10 Year Income				
Property tax (10)	8,618.3	12,430.1	16,952.5	
Interest	-	-	-	0
Total (11)	8,618.3	12,430.1	16,952.5	

10 Year Total	**Worst Case (12)**	**Nom. (13)**	**Best Case (14)**
	55,051.8	**92,886.8**	**137,775.8**

Notes:

(1) Based on average value of 10 lots per Long Beach Facts and Considerations Report 2013
(2) Best Case based on twice the estimate per Long Beach Facts and Considerations Report 2013
(3) Per R. Visnick Nov. 2021
(4) Assumes 200 hours @ $400/hour for nominal
(5) Per discussion with Mark Tyburski, Tyburski Appraisal Service, Hingham, MA
(6) Per R. Visnick Nov. 2021
(7) Worst Case Net = Worst Case Gross Proceeds less Worst Case Sales Expenses
(8) Nominal Gross Proceeds less Average Sales Expenses

(9) Best Case Net =Best Case Gross Proceeds less Best Case Sales Expenses
(10) See Option 3a Note 13
(11) See Option 1a, Note 2; taxes based on gross sales proceeds
(12) Worst Case 10 Year Total = Worst Case Net Proceeds plus Worst Case Additional 10 Year Income
(13) Mid Sales Proceeds plus Mid Additional 10 Year Income
(14) Best Case 10 Year Total = Best Case Net Proceeds plus Best Case Additional 10 Year Income

Sell to Single Entity Unrelated to Current Leaseholders

	Worst Case	Mid	Best Case
Total Gross Proceeds (from abc	46,665.5	80,644.2	120,966.3

As discussed in the report Long Beach Facts and Considerations, the following additional expenses are likely to be incurred

	Best Case	Average	Worst Case	Factor	
Bid Documents (1	1.2	1.8	2.4		2
Marketing (14)	24.3	36.4	48.5		
Litigation/Damag	2,040.5	3,060.8	4,081.0		
Total additional expenses	2,066.0	3,098.9	4,131.9		
Sales Expenses from above	143.0	187.5	232.0		
Total Sales Expenses	**2,209.0**	**3,286.4**	**4,363.9**		

	Worst Case (15)	Mid (16)	Best Case (17)
Net Sales Proceeds	**42,301.6**	**77,357.8**	**118,757.4**

Additional 10 Year Income				
Property Tax	7,851.4	11,951.3	16,662.6	
Interest	-	-	-	0
Total	7,851.4	11,951.3	16,662.6	

	Worst Case (18)	Mid (19)	Best Case (20)
10 Year Total	50,152.96	89,309.11	135,420.02

Notes:

(14) Best Case estimates taken from Long Beach Facts and Considerations Report 2013; Worst Case = double Best Case

(15) Worst Case 10 Year Total = Worst Case 10 Year Total above less Worst Case Additional Expenses

(16) Mid 10 Year Total = Mid Total above less Average Additional Expenses

(17) Best Case 10 Year Total = Best CaseTotal above less Best Case Additional Expenses

(18) Worst Case 10 Year Total = Worst Case Net Proceeds plus Worst Case Additional 10 Year Income

(19) Mid Sales Proceeds plus Mid Additional 10 Year Income

(20) Best Case 10 Year Total = Best Case Net Proceeds plus Best Case Additional 10 Year Income

Option 3 – Back to Nature

Option 3 -- Back to Nature **All figures in $1000's (e.g., 1,907.7 represents $1,907,700)**

10 Year Income:	**Minimum**	**Average**	**Maximum**
	0	0	0

10 Year Estimated Costs	**Best Case**	**Nominal/Average**	**Worst Case**		
Removal of Seawall and utilities (1)	5,800.0		5,800.0		
Construction oversight, etc. (2)	1,200.0		1,800.0	1.5	
Removal of pumping station (4)	26.5		53.0	2	
Environmental remediation (5)	220.0		440.0	220	
Removal of abandoned buildings (6)	1,800.0		3,750.0	12	25
Beach nourishment (7)	3,100.0		6,200.0	3100	
Subtotal	12,146.5		18,043.0		
Town's share *	3,036.6		18,043.0		
Legal Fees (8)	80.0		160.0	0.4	
Litigation Costs,damages (9)	2,040.5		4,081.0		
Total Estimated Costs	**5,157.1**	**-**	**22,284.0**		

10 Year Net	**Worst Case**	**Average**	**Best Case**
	(22,284.0)	**(13,720.6)**	**(5,157.1)**

Notes

* Best case assumes 75% federal or state funding; Worst case assumes 0% funding

(1) DPW estimate

(2),(3),(4),(5) Best Cases based on Long Beach Facts and Considerations Report; Worst Cases based on reasonable multipliers thereof.

(6) Best Case based on $12k each for 150 cottages; Worst Case =$25k each; nominal = average

(7) Best Case is for one beach nourishment at $3100k; Worst Case is for two beach nourishments

(8) Best Case assumes 200 hrs at $400/hr; Worst Case is 400 hrs at $400/hr

(9) Best Case based on Long Beach Facts and Considerations Report ($220k); Worst Case based on reasonable multipliers thereof.

Long Beach Developed for Public Use

The following additional expenses and income are based loosely on the Long Beach Facts and Considerations report:

10 Year Income

		Worst Case	Nominal	Best Case
Parking revenue	Years (10)	9	9	9
	Days/year	65	70	75
	Cars/day	100	150	200
	$/car	20	30	40
	Total (11)	1,170.0	2,835.0	5,400.0

Estimated 10 year costs

		Best Case	Nominal	Worst Case
Construction of facilities (12)		1,500.0	2,000.0	2,500.0
Staffing and maintenance		1,350.0	1,800.0	2,250.0
Debt service (13)		405.0	540.0	675.0
	Total	2,850.0	3,800.0	4,750.0

10 Year Additional Net	**Worst Case (1**	**Nominal (15)**	**Best Case (16)**
	(3,580.0)	(965.0)	2,550.0

Total 10 Year Net	**Worst Case (1**	**Nominal (18)**	**Best Case (19)**
	(25,864.0)	**(14,685.6)**	**(2,607.1)**

Notes:

(10) Allows 1 year for construction during first 10 year period

(11) For comparison, annual revenue for Gloucester's Good Harbor Beach is approximately $1.8 million

(12) Assumes completion in Year 1

(13) 9 years simple interest at 3%

(14) Worst Case Additional Net = Worst Case 10 Year Income less Worst Case 10 Year Additional Costs

(15) Nominal Additional Net =Nominal 10 Year Income less Nominal 10 Year Additional Costs

(16) Best Case Additional Net = Best Case 10 Year Income less Best Case 10 Year Additional Costs

(17) Worst Case Total 10 Year Net = Worst Case 10 Year Net plus Worst Case 10 Year Additional Net

(18) Nominal Total 10 Year Net =Nominal 10 Year Net plus Nominal 10 Year Additional Net

(19) Best Case Total 10 Year Net = Best Case 10 Year Net plus Best Case 10 Year Additional Net

Appendix A2 – References

Appraisal of Little Neck Ipswich, Lincoln Property Company, Nov. 5, 2010

2020 Hazard Mitigation Plan, Rockport, Massachusetts

Conomo Point Appraisal, Keystone Consulting Group, April 28, 2011

DPW Commissioners Sediment Transport Presentation June 8, 2015

Gloucester Daily Times, NOAA: Flood Risk Rising with High Tides, July 15, 2021

Long Beach Facts & Considerations September 12, 2013

Long Beach Infrastructure Recommendation 2017

Long Beach Lease 2013

Long Beach Lease prior to 2013

Long Beach Lease Amendment, June 2018

Long Beach Lease Renewal Committee Presentation for the Board of Selectmen, May 20, 2013

Long Beach Seawall Improvements, Public Informational Meeting, May 22, 2012

Long Beach Sediment Transport Study, Applied Coastal Research and Engineering, October 24, 2014

Massachusetts Climate Change Adaptation Report, September 2011

Minutes of Board of Selectmen Workshop, October 16, 2018

Minutes of DPW Commission Meeting, April 16, 2014

Newburyport Climate Resiliency Plan, October 8, 2020

Sewer Betterment Plan on Long Beach, Donohoe and Parkhurst, June 2003

Shore & Beach, Dune Management Challenges on Developed Coasts, Winter 2016

State of the Coast, Massachusetts North Shore, Trustees of the Reservations, 2020

StormSmart Properties Fact Sheet 7: Repair and Reconstruction of Seawalls and Revetments, Massachusetts Coastal Zone Management, Dec. 2013; updated 2018

Town of Rockport Finance Committee Recommendations Concerning Long Beach (draft), September 13, 2013

Town of Rockport Finance Committee Long Beach Recommendations (undated)

Wicked Local -- Access denied: Ipswich's Little Neck officially closes to public, June 20, 2013

Appendix A3 – Links to Resources

Long Beach Options Committee information-photos-links
(Documents, images and reports related to Long Beach)

Hazard Mitigation Plan for Rockport (2020)
(Includes suggestions for Long Beach's future)

What is the difference between storm surge and storm tide?

AR SIDERS Managed Retreat Presentation for Town of Rockport

Long Beach Settlement Agreement

Long Beach Lease (expires Dec. 2023)

https://www.rockportma.gov/long-beach-seawall-repairs

Hampton, NH Approach to flooding of homes
(Includes tasks, grants and timeline by the Coastal Hazards Adaptation Team (CHAT)

Hampton, NH Timeline for Resolving Flooding

Massachusetts Sea Level Rise and Coastal Flooding Viewer

Study Projects a Surge in Coastal Flooding, Starting in 2030s (nasa.gov)

Managed Retreat Toolkit » Introduction

Coastal States Seek to Limit Seawall Construction

Dam and Seawall Repair or Removal Program Grants and Funds

Storm Surge

Plum Island

Managing the Retreat from Rising Seas: Lessons and Tools from 17 Case Studies
(includes Hampton, NH)

Meetings — Plum Island (plumislandsealevelrise.com)
videos mentioned in 1 September meeting

Event Archive — Storm Surge (storm-surge.org)
videos mentioned in 1 September meeting – see Newburyport example.

Position Statement | Ipswich Citizens for Public Trust (ipswichtrust.org)

Massachusetts Office of Coastal Zone Management | Mass.gov

Gloucester Daily Times – story about AR Siders' managed retreat presentation.
https://www.gloucestertimes.com/news/long-beach-option-committee-learns-more-about-managed-retreats/article_f5fef016-7fa0-11ec-ae09-4372c7dd76f9.html

Appendix A4 -- Acknowledgments

The Long Beach Options Committee gratefully acknowledges the following for their contributions to this report:

Tim Good, Chairman, Rockport Board of Assessors
Gary LeBlanc, Director, Rockport Department of Public Works
Kelsey Schmink, Zoom Host
Mitch Vieira, Rockport Town Administrator
Robert Visnick, Rockport Town Moderator

Toby Arsenian, Rockport resident
Carol Cooke, Rockport resident
Jay Diener, Hampton N. H. Coastal Hazards Adaptation Team
Cynthia Dittbrenner, Director of Coast and Natural Resources, The Trustees
Kirsten Howard, Univ. of New Hampshire Resilience Program Coordinator
Carri Hulet, Principal, CH Consulting
John Ramsey, Cofounder, Applied Coastal Research & Engineering
A.R. Siders, Professor, University of Delaware
Mark Tyburski, Tyburski Appraisal Service

Appendix A5 – Committee Members

Past and present Committee members:

Deirdre Clancy-Kelley
Brock Currier (Resigned December 2021)
Mary Devaney
Dianne Finch, Corresponding Secretary
Ken Kaiser, Chair
Tom Mikus, Vice Chair
Paul Murphy (Resigned December 2021)
Larry Neal
Paul Sena
Laurene Wessel

One of our members in hip waders on the northeasterly end of Long Beach Road during a site visit